

In the Claims:

1 1. (Currently amended) Method for transmitting a plurality of
2 information symbols between a first transceiver and a
3 second transceiver by modulating a carrier signal,

4 wherein

5 a different modulation index (M1, M2, M3, M4) is
6 assigned to each one of the information symbols, the
7 information symbols convey data, and the modulation indices
8 convey additional information in addition to and distinct
9 from the data,

10 at least one characteristic physical variable of the
11 carrier signal is modulated in accordance with the
12 different modulation indices (M1, M2, M3, M4) assigned
13 respectively to the information symbols that are modulated
14 onto the carrier signal to produce a modulated signal, and

15 the modulated signal is transmitted from the first
16 transceiver to the second transceiver, and the second
17 transceiver evaluates the modulated signal to obtain the
18 data and the additional information.

1 2. (Previously presented) Method according to claim 1,
2 wherein, alongside the frequency and phase, the amplitude
3 (A) is modulated as the characteristic physical variable of
4 the carrier signal.

1 3. (Original) Method according to claim 1, wherein the nth
2 information symbol is transmitted with a time-shift from
3 the (n+1)th information symbol.

Claim 4 (Canceled).

1 5. (Previously presented) Method according to claim 1,
2 comprising simultaneously transmitting a selected one (n)
3 of the information symbols and a subsequent one (n+x) of
4 the information symbols that follows the selected one of
5 the information symbols.

Claim 6 (Canceled).

1 7. (Currently amended) Method according to claim 1, wherein
2 ~~Method for transmitting a plurality of information~~
3 ~~symbols between a first transceiver and a second~~
4 ~~transceiver by modulating a carrier signal,~~
5 ~~wherein~~
6 ~~a different modulation index (M1, M2, M3, M4) is~~
7 ~~assigned to each one of the information symbols,~~
8 ~~at least one characteristic physical variable of the~~
9 ~~carrier signal is modulated in accordance with the~~
10 ~~different modulation indices (M1, M2, M3, M4) assigned~~
11 ~~respectively to the information symbols that are modulated~~
12 ~~onto the carrier signal, and~~
13 ~~not only the modulation indices (M1, M2, M3, M4) but~~
14 ~~also respective period lengths (T0, T1) of modulation~~

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15 periods differ respectively from one another to define
16 additional information symbols.

Claims 8 and 9 (Canceled).

1 10. (Previously presented) Method according to claim 1, wherein
2 the first transceiver controls the second transceiver by at
3 least one control signal, being a clock signal assigned to
4 an information symbol.

Claims 11 and 12 (Canceled).

1 13. (Previously presented) Method for transmitting a plurality
2 of information symbols between a first transceiver and a
3 second transceiver by modulating a carrier signal,
4 wherein
5 a different modulation index (M1, M2, M3, M4) is
6 assigned to each one of the information symbols,
7 at least one characteristic physical variable of the
8 carrier signal is modulated in accordance with the
9 different modulation indices (M1, M2, M3, M4) assigned
10 respectively to the information symbols that are modulated
11 onto the carrier signal, and
12 at least one of the information symbols comprises a
13 control signal for setting a data rate for a data
14 transmission of the modulated carrier signal by the first
15 transceiver, and the modulation index of the control signal

16 is smaller than the modulation index of a data signal
17 formed by others of said information symbols.

1 14. (Previously presented) Method according to claim 10,
2 wherein the second transceiver has no electronic circuit
3 for clock generation and is a passive transponder that uses
4 the clock signal for local clocking.

Claim 15 (Canceled).

1 16. (Currently amended) A method of producing and transmitting
2 a modulated information signal from a first device to a
3 second device, comprising the steps:
4 a) defining plural information symbols;
5 b) assigning plural different modulation indices
6 respectively individually to said information symbols,
7 wherein said modulation indices differ from one
8 another;
9 c) representing information items, which are to be
10 transmitted, with said information symbols, wherein
11 said modulation indices respectively assigned to said
12 information symbols represent additional information
13 in addition to and distinct from said information
14 items;
15 d) modulating said information symbols onto a carrier
16 signal, comprising modulating a characteristic
17 physical parameter of said carrier signal in
18 accordance with said different modulation indices

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19 respectively assigned to said information symbols, to
20 produce a modulated information signal;
21 e) transmitting said modulated information signal from
22 said first device to said second device; and
23 f) in said second device, evaluating said modulated
24 information signal to obtain said information items
25 and said additional information.

1 17. (Previously presented) The method according to claim 16,
2 wherein said information symbols include first and second
3 information symbols that differ from one another, and said
4 modulation indices include first and second modulation
5 indices that differ from one another and that are
6 respectively assigned to said first and second information
7 symbols.

1 18. (Previously presented) The method according to claim 17,
2 wherein said information symbols further include a third
3 information symbol that differs from said first and second
4 information symbols, and said modulation indices further
5 include a third modulation index that differs from said
6 first and second modulation indices and that is assigned to
7 said third information symbol.

1 19. (Previously presented) The method according to claim 18,
2 wherein said information symbols further include a fourth
3 information symbol that differs from said first, second and
4 third information symbols, and said modulation indices

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5 further include a fourth modulation index that differs from
6 said first, second and third modulation indices and that is
7 assigned to said fourth information symbol.

1 20. (Previously presented) The method according to claim 17,
2 wherein said first and second information symbols
3 respectively have different durations relative to one
4 another.

1 21. (Previously presented) The method according to claim 17,
2 wherein said first and second information symbols
3 respectively have different numbers and/or different
4 patterns of modulation pulses relative to one another.

1 22. (Previously presented) The method according to claim 16,
2 wherein said different modulation indices respectively have
3 predefined modulation index values that differ from one
4 another by predefined differences that can be detected and
5 differentiated between by said second device.

1 23. (Previously presented) The method according to claim 16,
2 wherein said information symbols respectively having said
3 different modulation indices assigned thereto respectively
4 represent different types of said information items that
5 are to be transmitted, and said additional information
6 represented by said different modulation indices
7 respectively identifies said different types of said
8 information items.

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1 **24.** (Previously presented) The method according to claim 16,
2 wherein said characteristic physical parameter of said
3 carrier signal being modulated in said step d) comprises a
4 frequency or a phase of said carrier signal.

1 **25.** (Previously presented) The method according to claim 16,
2 wherein said characteristic physical parameter of said
3 carrier signal being modulated in said step d) comprises an
4 amplitude of said carrier signal.

1 **26.** (Previously presented) The method according to claim 25,
2 wherein said different modulation indices give rise to
3 respective different maximum amplitudes and a consistent
4 amplitude modulation swing of said respective information
5 symbols modulated in said modulated information signal.

1 **27.** (Previously presented) The method according to claim 16,
2 wherein said information symbols are modulated in
3 succession respectively in successive time intervals one
4 after another in said modulated information signal.

1 **28.** (Previously presented) The method according to claim 16,
2 further comprising defining an additional information
3 symbol and modulating said additional information symbol
4 onto said carrier wave simultaneously with at least a
5 selected one of said information symbols defined in said

6 step a) by superimposing said additional information symbol
7 thereon in said modulated information signal.

1 29. (Currently amended) The method according to claim 16,

2 ~~A method of producing and transmitting a modulated~~
3 ~~information signal from a first device to a second device,~~
4 ~~comprising the steps:~~

5 ~~a) defining plural information symbols;~~

6 ~~b) assigning plural different modulation indices~~
7 ~~respectively individually to said information symbols,~~
8 ~~wherein said modulation indices differ from one~~
9 ~~another;~~

10 ~~c) representing information items, which are to be~~
11 ~~transmitted, with said information symbols;~~

12 ~~d) modulating said information symbols onto a carrier~~
13 ~~signal, comprising modulating a characteristic~~
14 ~~physical parameter of said carrier signal in~~
15 ~~accordance with said different modulation indices~~
16 ~~respectively assigned to said information symbols, to~~
17 ~~produce a modulated information signal; and~~

18 ~~e) transmitting said modulated information signal from~~
19 ~~said first device to said second device;~~

20 wherein said step d) comprises modulating said
21 information symbols successively in respective successive
22 time intervals onto said carrier signal, with one or more
23 of said successive time intervals respectively defining
24 respective successive signal periods bounded between field
25 gaps in said modulated information signal, and

26 further comprising defining further information
27 symbols that are respectively assigned respective ones of
28 said signal periods having respective different time
29 durations and that represent further information in said
30 signal periods having said different time durations.

1 30. (Previously presented) The method according to claim 16,
2 wherein at least one of said information symbols represents
3 a control signal, and further comprising receiving said
4 control signal in said modulated information signal in said
5 second device and controlling said second device
6 responsively to said control signal.

1 31. (Previously presented) The method according to claim 30,
2 wherein said second device is a passive transponder that
3 does not include a local clocking signal generator circuit,
4 wherein said control signal is a clock signal, and said
5 controlling of said second device comprises controlling a
6 local clocking of said second device in response to said
7 clock signal.

1 32. (Previously presented) Method according to claim 1, wherein
2 the additional information identifies respective data types
3 of the respective data conveyed by the information symbols.

[RESPONSE CONTINUES ON NEXT PAGE]